

Annex 2

GOVERNMENT OF THE UNITED STATES OF AMERICA

**PROPOSED NEW EMBASSY COMPOUND ON SUBDIVISION No. 694 OF
STAND 100, IBEX HILL ROAD, IBEX HILL, LUSAKA**

**TERMS OF REFERENCE FOR ENVIRONMENTAL IMPACT ASSESSMENT
STUDY**

1. INTRODUCTION

Under bi-lateral agreement between the governments of the Republic of Zambia and the United States of America, the American Embassy in Lusaka has purchased a piece of land from the National Housing Authority to construct a new compound which will house the various diplomatic missions of the United States to Zambia in a single location. The property, Subdivision 694 of Stand 100, is a 5 hectare plot located in the residential area of Ibex Hill in Lusaka which is accessed via Ibex Hill Road from Kabulonga Road.

1.1. Background

The project site is part of a vacant tract of land located in a relatively isolated area some good distance from any high density residential areas and from any commercial/industrial areas or activities. No commercial activities or other developments have taken place on the site previously, except for the utilization of the land for subsistence agricultural purposes by local residents over the years, a typical occurrence on disused plots around Lusaka.

The land has been rezoned for diplomatic use, and the tenure of the land can only be changed by bilateral agreement between the two governments.

1.2. The development

The project is a new compound housing the diplomatic missions of the Government of the United States of America to Zambia. This compound will contain modern facilities, accommodating the United States missions including the Embassy and the US AID mission under a single roof. This will improve efficiency of work, and enhance security of personnel and equipment by improving emergency responsiveness and evacuation preparedness of the missions.

The project will incorporate structures for the chancery, access control buildings, a warehouse and housing for the marines. It is anticipated that an on-site waste water treatment plant will be provided and the development will also include fuel storage and dispensing facility. Construction is expected to commence in the second quarter of 2008.

1.3. The assessment

Under the Second Schedule of the Environmental Impact Assessment (EIA) Regulations, Statutory Instrument No. 28 of 1997, of the Environmental Protection and Pollution Control Act (EPPCA) of 1990, the project falls under the category of Urban Development which specifies:

- Shopping centres and complexes – 10 000 m² and above, floor area

As the floor area of the development will be in excess of 10 000 m², it is a requirement that an Environmental Impact Assessment (EIA) study is carried out for the project following the guidelines and requirements of the Environmental Council of Zambia (ECZ). An Environmental Impact Statement (EIS) shall be prepared and then submitted to the ECZ for consideration. This shall be suitable for supporting any application made to ECZ by the developers for environmental approval of the project.

These Terms of Reference (ToR) are the scope of the EIA study. This has been based on the consultation within the EIA study team, with Government agencies and local authority, and the public. A public consultation meeting was held at Binnies Lodge, Ibex Hill, Lusaka on 14 November 2007. In addition to this there have been inspections of the project site and surrounding areas, taking into consideration the issues contained in the Third Schedule of the EIA guidelines.

The consultant shall provide information on all matters as specified in the content requirements of the ToR together with other such matters judged to be necessary by ECZ.

2. SCOPE OF STUDY

The EIA will address the following:

2.1. Legal Framework

- An outline of environmental policy, institutional framework and legislation applicable to the project including statutory regulations that should be complied with.
- Requirements for environmental permits that should be issued by ECZ for the construction and operation of the project.

2.2. Project Description

As stated, the project is a new compound housing the diplomatic missions of the Government of the United States of America to Zambia including the Embassy and the US AID mission. This compound will contain modern facilities, improve efficiency of work, and enhance security of personnel and equipment by improving emergency responsiveness and evacuation preparedness of the missions.

The project description will outline the planning, layout and infrastructure design and development of the new compound which incorporates the following:

- Structures for the chancery, access control buildings, a warehouse and housing for the marines
- Internal asphalt paved or gravel roads and car parking for officials, staff and visitors
- Waste water treatment plant
- Fuel storage and dispensing facility
- Electrical installations
- Storm water drainage
- Water system connected to LWSC mains and on site borehole, and fire water storage
- High security wall / fence around the compound
- Extension of tarred paving of IbeX Hill Road to project entrance

In addition, an outline will be provided of:

- Raw materials inputs to the project during construction and operational phases
- Expected by- and / or waste products of the project during construction and operational phases (e.g. sewage, solid waste, building waste, storm water runoff, etc.)
- Project activities during the construction and operational phases of the project that may have impacts on the environment.

2.3. Analysis of Alternatives

Five alternative sites were initially considered for the project, which were later short listed to two sites, namely a privately owned property in the Leopards Hill area and the current site. After an intense evaluation, the proposed site was found to meet all the required criteria. An analysis of reasonable alternative for the project will also include the no-action option and alternatives for water supply and sanitation.

2.4. Description of the Environment

A baseline description of the present environment of the proposed site and surroundings including the following:

2.4.1. Bio Physical Environment

- Location of the site
- Existing physical developments and infrastructure
- Geology, topography and soils
- Climate, air quality and noise environment

- Hydrology (ground water and surface water) - water flow, supply and quality and sanitation
- Vegetation and habitat

2.4.2. Social Economic Environment

- Site history
- Land tenure and zoning
- Settlement pattern
- Public and social amenities
- Traffic, road safety and communication
- Public health and safety

2.5. Assessment of Environmental Impacts

Potential impacts, both positive and negative will be identified with respect to those occurring both during the construction and operational phases in respect to:

- Likelihood of occurrence
- Magnitude and intensity
- Extent of affected area
- Duration
- Sensitivity of affected area

2.5.1. Impacts occurring during Construction Phase on:

- a. Topography and soil
- b. Air quality and noise environment
- c. Water supply, flow and quality
- d. Local ecosystem, vegetation and habitat
- e. Traffic, road safety and public access
- f. Public and occupational health and safety
- g. Raw materials

2.5.2. Impacts occurring during Operational Phase on:

- a. Air quality and noise environment
- b. Topography and soil
- c. Water supply, flow and quality
- d. Traffic and road safety
- e. Vegetation and habitat
- f. Public and occupational health and safety

2.6. Scoping Meeting

The concerns raised at the scoping meeting will be addressed in the EIS, and these are as follows:

- Management of waste water discharge
 - Investigation of the effectiveness of the area drainage system
- Formal approval of embassy building plans
- Mitigation measures for power shortages
- Management of on site sanitation
 - Arrangements if the sanitation measures fail
 - Proposals for the discharge of effluent, and how this relates to percolation points and existing boreholes
 - Monitoring of discharge

2.7. Mitigation Measures and Environmental Management Plan

All the necessary environmental mitigation measures will be identified in the EIA for the project construction and operational phases. This will outline the proposed measures for preventing, minimizing and compensating any adverse impacts, and for enhancing the beneficial effects. The suggestions are to be incorporated into the project design.

The Embassy of United States of America Overall will be responsible for overall the environmental management of each phase of the project. This will involve implementation of Environmental Management and Monitoring activities, including compliance with relevant health, safety and environmental standards. During construction, the Contractor will be primarily responsible. During operation the U.S. Embassy Facilities Manager will be primarily responsible. The Environmental Management and Monitoring Plan (EMMP) will serve as a useful management tool to ensure implementation of these measures.

3. EIS STRUCTURE

In line with the ECZ EIA guidelines, and without prejudice to the issues included in the content of the TOR, it is proposed that the EIS include the following sections.

1. Executive summary
2. introduction including the scope and methodology of the study
3. Applicable legislation
4. Baseline description of existing environment
5. Project description
6. Project alternatives
7. Assessment of potential impacts
8. Mitigation measures
9. Environmental Management and Monitoring Plan (EMMP)